Scientific Services Program (SSP)

PERFORMANCE WORK STATEMENT (PWS)

1. TITLE – Provide a title for this scientific effort that describes the area of research. Avoid generic titles such as “Environmental Technology”, “Biodetection” or “Computer Studies” that do not distinguish the work from other tasks.

*Example*: Neural-Network-Based Target Identification

2. GENERAL – Include background information to fully disclose the scientific/technical nature of the specific problem related to research and development that is being undertaken. Prepare a brief but complete description of the scientific services desired. There is no need to further expound on the greater mission of the sponsoring activity unless it specifically relates to this task.

*Example*: Identification in a cluttered environment of fixed-and-rotary-wing aircraft or ground vehicles such as tanks and trucks is difficult with conventional pattern recognition techniques that require the algorithm designer to specify completely the image processing scheme. Neural-networks provide a different approach to the problem in that they can train themselves to perform the identification task once given a training set of examples spanning the occurrences of interest. The services of a scientist or engineer, with technical support, are required to evaluate specific problems relating to the development of a neural-network-based target identification system that can estimate the aspect angle of the target and work in a cluttered environment.

3. OBJECTIVE – State the technical problem to be solved and the objective(s) or anticipated outcome of the research.

*Example:* The objective of this effort is to develop a precise form of a neural-network and to determine, in a hybrid scheme with some conventional pattern recognition algorithms, the usefulness of the neural-network. The tools for efficient computer utilization to accomplish this task must also be developed and specified.

4. SPECIFIC TASKS – This section should clearly describe the scientific/technical work to be accomplished by the contractor. Using a numbered list, briefly describe the research tasks to be performed. Be succinct when describing the specific technical tasks but provide enough detail so that the tasks are recognizable as research.

*Example:* The following tasks shall be performed independent of Government supervision, direction, or control:

1. Analyze strategies for using self-organizing, neural-network algorithms for 3-dimensional tactical target and wire frame model recognition.
2. Study and develop segmentation and feature extraction procedures that combine conventional and neural-network methods for target recognition in very cluttered environments.
3. Evaluate and develop image processing and design tools for concept implementation.

5. REPORTING REQUIREMENTS – At a minimum, this paragraph must state that monthly reports and a final report summarizing the work performed and the results and conclusions derived shall be submitted to the COR at the sponsoring agency and that one copy of the monthly and final reports shall be submitted to the prime contractor. Sponsors should also indicate the number of report copies desired, when the reports are due (i.e., days after contract award or a given calendar date), and any format requirements. This is applicable for the final report, interim report(s), software, floppy discs, or any other deliverables. The requirement to deliver computer generated reports and software must clearly indicate the computer system on which the reports or software must operate. If the sponsoring agency desires to review and approve a draft of the final report, indicate the responsibility of the subcontractor and the Government to submit and return respectively the draft report on specific dates. Reports generated by subcontractors shall not be released for publication or dissemination without the ARO contracting officer's written approval following coordination with the COR. NOTE: The COR receives, inspects, and accepts all technical reports. Additionally, all DoD sponsoring agencies must complete the Contract Manpower Reporting (CMR) requirement. Please consult your contracting or finance department for assistance with these codes.

*Example*:

1. Monthly reports summarizing the technical and financial status of the task.
2. A final report summarizing the work performed and the results and conclusions derived shall be submitted to the COR and to the prime contractor at the end of the contract period of performance.
3. Contract Manpower Reporting (CMR). Section 2330a of title 10, United States Code (10 USC 2330a), requires the Secretary of Defense to submit to Congress an annual inventory of contracts for services performed during the prior fiscal year for or on behalf of the Department of Defense (DoD). The inventory must include the number of contractor employees using direct labor hours and associated cost data collected from contractors. The prime contractor and all subcontractors are required to completely fill in all the information at the following web address: http://www.ecmra.mil/. In addition to their own Location data, the prime contractor is responsible for entering the all of the Order and Contact data. Subcontractors are responsible for entering only their Location data. The prime contractor has overall responsibility for ensuring subcontractors enter their respective data and shall enter their data in a timely manner, as subcontractors cannot input any information into the CMRA system until the prime contractor has entered the Order and Contact data. For this task order:
	* 1. The Unit Identification Code (UIC) of the DoD Requiring Activity is:
		2. The Command of the DoD Requiring Activity is:
		3. The Federal Service Code (FSC) is:
		4. The Weapons System that is supported is:

6. QUALIFICATION REQUIREMENTS – State the minimum qualifications considered necessary for performance of the work. Do not use overly restrictive qualifications criteria that would unnecessarily restrict competition or cause selection of an overly qualified individual, nor would give the appearance of a personal service contract.

*Example*: The consultant/analyst selected for the performance of this performance work statement must have specific experience in neural-network algorithms as evidenced by publications in peer-reviewed journals. The consultant/analyst must have achieved technical training equivalent to the Ph.D. level with a strong background in computer programming, digital image processing and target identification.

7. PLACE AND PERIOD OF PERFORMANCE, WORK DAYS, AND TRAVEL –

1. Place of Performance. Express place(s) of performance by location and number of working days at each location or an estimated percentage of time at specified locations.
2. Period of Performance. Indicate the desired inclusive performance period, not to exceed 18 months. (For example, "The performance period shall be six months, beginning on the award date of the contract.")
3. Level of Effort. Estimate the number of working hours for each consultant/analyst. Estimate the number of working hours for other required labor such as technicians, graduate students, research assistants, or clerical assistants.
4. Estimated Travel. Identify anticipated travel for each individual to include destination(s), number of trips, and duration of trips. If conference travel is anticipated identify the conference to the extent possible.

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| --- | --- | --- | --- |
| **No. of Trips** | **No. of Meeting** **Days/ Trip** | **No. of People/Trip** | **Destination** |
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*Example*:

1. Place of Performance: Except for the travel listed in paragraph 7.d. below, all work will be at the performer’s location.
2. Period of Performance: The period of performance shall be from the effective date of the delivery order through the following 12 months.
3. Level of Effort: An estimate of 360 working hours for a Principal Investigator, 320 working hours for a post doctoral research assistant and 320 working hours each for two graduate students.
4. Travel: Trips are contemplated as follows: Four 3-day trips to the Army Research Development and Engineering Center (ARDEC) by the Principal Investigator. One 7-day trip to ARDEC by the Post Doc and each graduate student.

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| --- | --- | --- | --- |
| **No. of Trips** | **No. of Meeting** **Days/ Trip** | **No. of People/Trip** | **Destination** |
| 4 | 3 | 1 | ARDEC / Picatinny Arsenal, NJ |
| 1 | 7 | 2 | ARDEC / Picatinny Arsenal, NJ |

8. RESTRICTIONS & SPECIAL REQUIREMENTS – Fully disclose and evaluate any known or potential conflict of interest that may arise from contracting with a particular firm or individual for performance of the work. A conflict of interest exists when the nature of the work to be performed under a proposed Government contract may, without some restriction on future activities, (a) result in an unfair competitive advantage to the subcontractor or (b) impair the subcontractor's objectivity in performing the work. If no known or potential conflict of interest exists, so state. State if pre-placement physical exams, immunizations, or specialized training is required associated with the performance of this task. Identify any regulatory requirements that must be complied with during the performance of this work.

Finally, the following statement must be reiterated in this section of the PWS: Any work performed at a government site during the period of performance will be conducted under the jurisdiction and protection of the government agency’s occupational health, safety, emergency management and notification, and environmental management and surveillance programs. The government agency will provide the contractor and/or subcontractor performing this work the same workplace orientation, health and safety training, personal protective equipment (including instruction on proper use and maintenance), pre-placement physical examinations, immunizations, and any other health, safety, environmental training/instruction as others performing similar work at the same location..

*Example:* There are no known existing or potential conflicts of interest associated with this task. The contractor selected for this task must have a pre-placement physical exam and current immunizations for working with biological agents. Contractor facilities must be in compliance with Army Regulation (AR) AR 385-69 – Biological Defense Safety Program, AR 50-X- Biosurety Program, DOD Directive 5210.88, Safeguarding Biological Select Agents and Toxins. Any work performed at a government site during the period of performance will be conducted under the jurisdiction and protection of the government agency’s occupational health, safety, emergency management and notification, and environmental management and surveillance programs. The government agency will provide the contractor and/or subcontractor performing this work the same workplace orientation, health and safety training, personal protective equipment (including instruction on proper use and maintenance), pre-placement physical examinations, immunizations, and any other health, safety, environmental training/instruction as others performing similar work at the same location.

9. SECURITY – If no security clearance is required, so state. Otherwise, identify the appropriate level of clearance; e.g., Confidential, Secret, Top Secret, or Top Secret – Sensitive Compartmented Information. The performance work statement shall not contain classified information; however, an unclassified performance work statement may require a classified final report. A security clearance shall not be requested for escort purposes that may be satisfied by a National Agency Check (NAC). When a non-escort badge is required, the sponsoring agency is responsible for processing a NAC. A performance work statement requiring special handling due to unclassified sensitive data must identify such data and provide specific instructions relative to special handling. The prime contractor is responsible for all SSP security matters, in accordance with provisions of the National Industrial Security Program Operating Manual (NISPOM). Should a DD 254 be required, the prime contractor will issue it to the subcontractor in accordance with provisions of the NISPOM level of security clearance required for this effort.

*Example*: None required; the effort is unclassified.

10. HUMAN SUBJECTS & ANIMAL USE – State whether human subjects or animals are, or are not, to be used during this study. If either human subjects or animals are to be used in the conduct of this work, state the regulatory requirements that will be followed pertaining to Institution Review Board (Human Subjects) or Institution Animal Care & Use Committee (IACUC) reviews.

*Example*: Human subjects are required. University IRB, U.S. Navy IRB, and Battelle IRB reviews and approvals are all required before any work can begin involving human subjects.

11. TASK ORDER CONTRACTING OFFICER’S REPRESENTATIVE (COR) – Provide the name, full address, and e-mail address of the scientist or technical person who is sponsoring the selected candidate. The COR is responsible for monitoring the progress of this effort and completing all actions in COR appointment letter. All formal correspondence is sent to the COR of record for the SSP task.

1. Name:
2. Command:
3. Agency:
4. Street Address (Include Office Symbol):
City, State and 9-digit zip code
5. E-Mail:
6. Phone: DSN; Commercial; FAX

12. ALTERNATE TASK ORDER CONTRACTING OFFICER’S REPRESENTATIVE – Provide the name, full address, and e-mail address of the scientist or technical person who can answer questions about the task order and/or sign invoices in the event the COR is unavailable (TDY, vacation, etc.). An Alternate COR is suggested but not required.

1. Name:
2. Command:
3. Agency:
4. Street Address (Include Office Symbol):
City, State and 9-digit Zip code
5. E-Mail:
6. Phone: DSN: ; Commercial ; FAX:

13. ADMINISTRATIVE POINT OF CONTACT – Agencies are encouraged to appoint a central agency administrative POC to review compliance with prescribed SSP procedures and to coordinate SSP requests with ARO. Agency administrative POC's significantly reduce processing time by resolving common problems.

1. Name:
2. Command:
3. Agency:
4. Street Address (Include Office Symbol):
City, State and 9-digit zip code
5. E-Mail:
6. Phone: DSN: ; Commercial ; FAX:

14. RECOMMENDED SOURCE – It is not required or suggested that the COR always include recommended sources. The prime contractor and the ARO have a current data base which contains approximately 3,600 qualified sources which span many scientific and technical disciplines. However, if the COR knows of a qualified source, indicate the name, address, telephone and fax numbers, and e-mail address for the recommended source(s). The ARO contracting officer will refer these suggestions to the SSP Office for consideration.

1. Name:
2. Institution/Company Name:
3. Street Address:
City, State and 9-digit zip code
4. E-Mail:
5. Phone: DSN: ; Commercial ; FAX:

15. RELEVANCE – Briefly explain how the requested work will advance scientific and technical knowledge and explain the military relevance of the advanced knowledge to agency and/or national goals.

*Example*: This work will support ARDEC’s mission in target identification.

16. CAPABILITY STATEMENT – Each performance work statement must contain the following or a similar statement: The requesting agency does not have the necessary in-house capability to perform the tasks specified in this performance work statement.

*Example*: ARDEC does not have the necessary in-house capability to perform the work specified in the performance work statement.

17. GOVERNMENT FURNISHED PROJECT MATERIALS & EQUIPMENT (GFE). Identify only project materials and equipment that the Government will provide to the task performer to complete this task. The purchase of equipment by the task performer will be considered on a case by case basis; however, the SSP may not be used solely to procure permanent equipment. Equipment purchased using Government funding during the period of performance shall be added to the list of GFE for that order and shall be subject to Government disposition at the end of the period of performance. For tasks where the work is performed at a Government installation, the task sponsoring agency should provide all necessary materials. Where feasible, the task sponsoring agency should provide all necessary equipment to complete an SSP task..